



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,262	03/22/2004	Masahiko Kubo	1254-0245PUS1	8959
2292	7590	09/18/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			RODEE, CHRISTOPHER D	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/805,262

Applicant(s)

KUBO, MASAHIKO

Examiner

Christopher RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The material added to the specification at page 10, lines 16 and 17, is objected to as being an improper incorporation. The amendment includes a statement that there is no new matter but does not include a statement that the material being inserted is the material previously incorporated by reference. See the last Office action, p. 2, and 37 CFR 1.57(f). Applicants are also required to provide a copy of the JIS K 2235-5.4 for the file and, if available, an English translation. See 37 CFR 1.57(e). This copy must be accompanied by a statement that the copy supplied consists of the same material incorporated by reference in the referencing application.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2002-311642.

This rejection was presented in the last Office action. The rejected claims remain as presented at the time of the first Office action. Rather than amend the claims, applicants traverse this rejection stating, "the reference does not expressly teach the combination of a carnauba wax and a nonpolar paraffin wax, particularly together with a negatively-charged full color toner as claimed" (response pp. 9-10). The Examiner has carefully reviewed the applied JP document and the rejection as previously set forth. The JP reference specifically discloses

Art Unit: 1756

the toner containing a polyester binder resin with an acid number (i.e., acid value) of 0.5 to 20 mg KOH/g (§ [0030]), a colorant, and carnauba wax (§§ [0031], [0032], [0038]). The document also teaches a release agent as included in the toner and specifically discloses paraffin wax (§ [0037]). The document does identically disclose the claimed invention because the artisan would immediately envisage a negatively charged toner comprising a polyester binder resin with an acid number of 20 mg KOH/g, a colorant, carnauba wax, and paraffin wax. There is no requirement that the reference "expressly teach" the claimed toner (e.g., in a single example). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In the JP document each and every element of the claim is set forth in the reference. Further, the disclosures of the JP document are sufficiently limited and well delineated as to identically disclose the claimed invention. The artisan reviewing the JP document would understand that only two charging types are possible (i.e, positive and negative, both of which are taught) and that a releasing agent is desired and that one of 12 releasing agents is acceptable. The limited number of options available provides sufficient boundaries on the disclosed toner to delineate a toner within the scope of the claims.

The rejection is still seen as proper and is maintained.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-267338 in view of *Handbook of Imaging Materials* to Diamond, pp. 162-165, 167, 168.

Art Unit: 1756

The claims are the same as presented for consideration at the time of the last Office action. These claims were rejected by the same combination of references as set forth above.

Applicants traverse the rejection because the JP document does not disclose the claimed combination of carnauba wax and nonpolar paraffin wax as releasing agents in a toner also containing binder resin and colorant. Applicants also rely on the evidence in the specification to show that the claimed combination of materials in the toner gives an unexpected result as compared to certain examples having different characteristics from those preferred for the instant toner.

Although applicants are correct that the JP document does not exemplify a toner having at least a colorant, a releasing agent and a binder resin where the releasing agent is a mixture of carnauba wax and nonpolar paraffin wax, the JP document does exemplify a toner having the requisite binder resin, coloring agent, and carnauba wax in Example 3. The reference also teaches that paraffin wax is an effective wax in the toner (§ [0029]). Each of the recited waxes is taught by the reference as useful and as alternatives for each other for the same function. As discussed in the last Office action, "the artisan would also have found it obvious to use a combination of carnauba and paraffin waxes disclosed by the reference as effective because 'it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art.' *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980)." The use of the combined carnauba and nonpolar paraffin waxes would have been obvious given the disclosure of the Japanese document in combination with the legal reasoning given in *Kerkhoven*. It is true that the JP document does not disclose the same benefit disclosed in the specification for the combination of waxes (see response pp. 7-8), there is no

Art Unit: 1756

requirement in US law that the prior art disclose applicant's concerns in order to set forth a proper case of obviousness under section 103. See *In re Dillon*, 16 USPQ2d 1897 (Fed. Cir. 1990). The combined art sets forth a *prima facie* case of obviousness.

Applicants also rely on the evidence of record to show that the claimed toner has an unexpected benefit due to the combination of waxes in the toner having the recited binder resin containing the polyester and the colorant. The evidence of record has been considered with specific reference to the discussion of the toners in Table 1 (spec. p. 12) and the copying properties of these toners disclosed in Table 2 (p. 14). Table 1 appears to have an editorial error because it has two columns disclosing the melting temperature of the wax mixture and two columns disclosing the Acid value. The specification on page 11 states that the Table discloses the DSC peak temperature, penetration, mixing ratio, and addition amount of the wax. It is presumed that the headings in the Table should have been presented in this order for the wax rather than the melting temperature of the wax mixture and the acid value.

Reviewing the evidence in this manner, it is noted that many of the comparative examples also have the requisite characteristics of the claimed toner. With respect to claim 1, Examples 1-12 and Comparative Examples 3-10 have the requisite components and polyester acid value. The results for these examples, as summarized in Table 2, show characteristics that appear to be both within and outside the bounds of what the inventors desire yet all these examples are within the scope of claim 1. The dependent claims also have inventive and comparative examples within the scope of the claims. Specifically, Comparative Examples 3-6, 9 and 10 are within the scope of claim 2, Comparative Examples 5-10 are within the scope of claim 4, Comparative Examples 3, 4, and 7-10 are within the scope of claim 5, and Comparative Examples 3-8 are within the scope of claim 6. It is unclear how the evidence shows an

Art Unit: 1756

unexpected result for the instant invention when the comparative examples included within the scope of the claims have results not desired by applicants.

It is also not clear that the inventive examples show an unexpected result over the inventive examples. As an example, the non-offset region, fixing strength, storability, and fogging results for Comparative Example 6 are the same as or nearly the same as those for the inventive examples. The Examiner acknowledges that Comparative Example 6 has a lower upper non-offset region than the inventive examples but there does not appear to be a practical advantage for a higher upper offset region because the fixing member would have to be hotter and consume more power to use this upper region. Comparative example 10 appears to have all features nearly the same as those indicated by the inventive examples as desired. It is unclear how the evidence is showing an unexpected result for the claimed invention versus the comparatives.

The rejection is still seen as appropriate and is maintained.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-311642.

This rejection was presented in the last Office action. Applicants traverse this rejection for the same reasons as the section 102 rejection over this reference and for the reasons given in the section 103 rejection over JP '338 above. Applicants stress that the reference does not teach the combination of waxes and physical properties of the claims.

In response, the Examiner will rely on the disclosure of the toner containing a polyester binder resin with an acid number (i.e., acid value) of 0.5 to 20 mg KOH/g (¶ [0030]), a colorant, and carnauba wax in an amount of from 1 to 10 weight % (¶¶ [0031], [0032], [0038]), and the teaching of a release agent, such as paraffin wax (¶ [0037]). The Examiner will maintain the

Art Unit: 1756

position that it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a combination of these waxes because the reference discloses carnauba wax as required and discloses paraffin wax as one of a relatively small number of possible release agents. Given this limited disclosure, the artisan would have found it obvious to use the carnauba wax and the paraffin wax as a release agent in order to obtain the results of the invention.

The deficiencies in the Examples are discussed above concerning the JP '338 reference and are seen as similarly applicable to the rejection here.

The rejection is still seen as proper and is maintained.

### ***Double Patenting***

Claims 1-7 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 10/805206.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending claims identify a toner composition that is that is more specific than the claimed toner except for a slightly broader range of acid value (5 to 20 in the copending application versus 7 to 20 in the instant claims). However, given the specific disclosure of an acid value of 20 mg KOH/g and the fact that the ranges are nearly coextensive, it would have been obvious to select an acid value within the scope of the instant claims, such as at 20 mg KOH/g, in order to obtain an effective toner. New claim 7 is included in this rejection based on the reasoning above and in view of new claim 7 in copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1756

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cdr  
11 September 2006



CHRISTOPHER RODEE  
PRIMARY EXAMINER